

Application Ser. No. 10/613,956

Title: COMPOSITION FOR COMBATING/REPELLING INSECTS, BIRDS, DIRTS AND PARASITES

Response to Office Action dated: September 12, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (withdrawn) Composition for combating at least one living organism selected from the group consisting of insects, molluscs, acarides, mites, ticks and parasites or for repelling at least one element selected from the group consisting of insects, molluscs, acarides, mites, ticks, parasites, water, dirt and birds, said composition comprising at least as active agent hydrophobic silicon (Si) containing particles with an average primary particle size of less than 100nm.
2. (withdrawn) The composition of claim 1, in which the hydrophobic silicon containing particles comprise also some aluminum.
3. (withdrawn) The composition of claim 1, which comprises at least 0.5% by weight hydrophobic silicon containing particles with an average primary particle size of less than 100nm.
4. (withdrawn) The composition of claim 1, which comprises at least 2% by weight hydrophobic silicon containing particles with an average primary particle size of less than 100nm.
5. (withdrawn) The composition of claim 1, which comprises at least 7% by weight hydrophobic silicon containing particles with an average primary particle size of less than 100nm.
6. (withdrawn) The composition of claim 1, which comprises at least 15% by weight hydrophobic silicon containing particles with an average primary particle size of less than

100nm.

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7. (withdrawn) The composition of claim 1, which comprises hydrophobic silicon containing particles, said particles having an average primary particle size of less than 50 nm.
8. (withdrawn) The composition of claim 1, which comprises hydrophobic silicon containing particles, said particles having an average primary particle size comprised between 5 and 40 nm.
9. (withdrawn) The composition of claim 1, in which the hydrophobic silicon containing particles have a SiO₂ content of at least 50% by weight.
10. (withdrawn) The composition of claim 1, in which the hydrophobic silicon containing particles have a SiO₂ content of at least 80% by weight.
11. (withdrawn) The composition of claim 1, in which the hydrophobic silicon containing particles with a primary particle size of less than 100nm have a BET surface area of at least 40m²/g.
12. (withdrawn) The composition of claim 1, in which the hydrophobic silicon containing particles with a primary particle size of less than 100nm have a BET surface area of at least 100 m²/g.
13. (withdrawn) The composition of claim 1, in which the hydrophobic silicon containing particles with a primary particle size of less than 100nm have a BET surface area of at least 125 m²/g.

14. (withdrawn) The composition of claim 1, in which the hydrophobic silicon containing particles are hydrophobic particles selected from the group consisting of SiO_2 particles, clay and mixtures thereof.
15. (withdrawn) The composition of claim 1, in which the active hydrophobic silicon containing particles are hydrophobic clay particles selected from the group consisting of kaolinite, montmorillonite, attapulgite, hectorite, smectite, illite, bentonite, halloysite, vermiculite, sepiolite, beidellite, palygorskite, talc, SiO_2 , and mixtures thereof.
16. (withdrawn) The composition of claim 1, in which the active hydrophobic silicon containing particles are particles selected from the group consisting of kaolinite, montmorillonite, attapulgite, hectorite, smectite, illite, bentonite, halloysite, vermiculite, sepiolite, beidellite, palygorskite, talc, SiO_2 , and mixtures thereof, said particles being provided with a hydrophobic coating.
17. (withdrawn) The composition of the preceding claim, in which the hydrophobic coating is made of a silicon containing product selected from the group consisting of chlorosilane, disilazane, fluorosilane, polysiloxane, cyclotetrasiloxane, methacrylic silane, silicon oil, modified silicon oil, and derivatives thereof.
18. (withdrawn) The composition of claim 1, which comprises coated silicon containing particles provided with an outer hydrophobic silicon containing coating.
19. (withdrawn) The composition of claim 1, which further comprises clay particles with an average particle size greater than $1\mu\text{m}$.

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20. (withdrawn) The composition of claim 1, which further comprises clay particles with an average particle size comprised between 10 μ m and 100 μ m.

21. (withdrawn) The composition of claim 1, in which the hydrophobic silicon containing particles are particles provided with a hydrophobic silicon containing coating which comprises at least an element selected from the group consisting of functionalized silanes, siloxane, silicon oil, modified silicon oil and mixtures thereof.

22. (withdrawn) The composition of claim 1, in which the hydrophobic silicon containing particles are particles provided with a hydrophobic coating comprising at least a compound selected from the group consisting of ammoniums, phosphoniums and mixtures thereof.

23. (withdrawn) The composition of claim 1, in which the hydrophobic silicon containing particles are particles provided with a hydrophobic silicon containing coating, whereby said coating comprises at least carbon atoms and at least one or more atoms selected from the group consisting of P, S, O, N, Cl, F, I.

24. (withdrawn) The composition of claim 1, in which the hydrophobic silicon containing particles are particles provided with a hydrophobic silicon containing coating which comprises at least one function selected from the group consisting of amino, ureido, thio, halogeno hydrocarbon group, cyano, isocyanato, mercapto, disilazane, acrylic, methacrylic and mixtures thereof.

25. (withdrawn) The composition of claim 1, which comprises at least hydrophobic particles selected from the group consisting of hydrophobic bentonite particles, hydrophobic hectorite particles, and mixtures thereof.

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26. (withdrawn) The composition of claim 1, which comprises at least hydrophobic particles with a size comprised between 1 and 100 μ m selected from the group consisting of hydrophobic bentonite particles, hydrophobic hectorite particles, and mixtures thereof.

27. (withdrawn) The composition of claim 1, which comprises at least hydrophobic particles with a size comprised between 10 and 100nm selected from the group consisting of hydrophobic bentonite particles, hydrophobic hectorite particles, and mixtures thereof.

28. (withdrawn) The composition of claim 1, which comprises

- from 0.01 % by weight to 99.99% by weight of hydrophobic silica, and
- from 0.01 % by weight to 99.99% by weight of hydrophobic clay

29. (withdrawn) The composition of claim 28, in which the hydrophobic clay comprises clay particles with a size comprised between 1 μ m and 100 μ m.

30. (withdrawn) The composition of claim 1, which comprises

- from 0.01 % by weight to 99.99% by weight of hydrophobic silica, and
- from 0.01 % by weight to 99.99% by weight of hydrophobic particles selected from the group consisting hydrophobic bentonite particles, hydrophobic hectorite particles, and mixtures thereof.

31. (withdrawn) The composition of claim 30, in which the hydrophobic particles selected from the group consisting hydrophobic bentonite particles, hydrophobic hectorite particles, and mixtures thereof comprises hydrophobic particles with a size comprised between 1 μ m and 100 μ m.

32. (withdrawn) The composition of claim 1, which has the form of an aqueous dispersion

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33. (withdrawn) The composition of claim 1, which further comprises at least a gelling agent.

34. (withdrawn) The composition of claim 1, which comprises at least a gelling agent selected from the group consisting of water soluble gelling agent and water dispersible gelling agent.

35. (withdrawn) The composition of claim 1, which comprises from 0.01 to 10% by weight of gelling agent selected from the group consisting of water soluble gelling agent and water dispersible gelling agent.

36. (withdrawn) The composition of claim 1, which comprises from 0.01 to 5% by weight of gelling agent selected from the group consisting of water soluble gelling agent and water dispersible gelling agent.

37. (cancelled) The composition of claim 1, which comprises at least one gum selected from the group consisting of guar gum, xanthan gum, scleroglucan and mixtures thereof.

38. (currently amended) Composition for combating at least one living organism selected from the group consisting of insects, molluscs, acarides, mites, ticks and parasites or for repelling at least one element selected from the group consisting of insects, molluscs, acarides, mites, ticks, dirts and parasites, said composition comprising:

- at least as active agent, at least 7% by weight of hydrophobic silicon (Si) containing particles, said particles:

(a) comprising:

a hydrophobic coating;

with a SiO₂ content of at least 80% by weight; ~~with~~

an average primary particle size comprised between 5 and 40nm; ~~[[,]]~~ and

with a BET surface of at least 125m²/g; ~~[[,]]~~ and

(b) being selected from the group consisting of kaolinite, montmorillonite, attapulgite, hectorite, smectite, illite, bentonite, halloysite, vermiculite, sepiolite, beidellite, palygorskite, talc, SiO₂, and mixtures thereof; and

- at least two gums selected from the group consisting of guar gum, xanthan gum and scleroglucan.

39. (withdrawn) The composition of claim 1, which further comprises at least one solid agent selected from the group consisting of hydrophobic zeolite, hydrophobic carbonate, and mixtures thereof.

40. (withdrawn) The composition of claim 1, which has the form of a water dispersible powder.

41. (withdrawn) The composition of claim 1, which is an aqueous composition with a content in hydrophobic silica containing particles with a primary particle size of less than 100nm comprised between 0.5% and 70% by weight.

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42. (withdrawn) The composition of claim 1, which is an aqueous composition with a content in hydrophobic silicon containing particles with an average primary particle size of less than 100nm of at least 2% by weight.

43. (withdrawn) The composition of claim 1, which is an aqueous composition with a content in hydrophobic silicon containing particles with an average primary particle size of less than 100nm of at least 7% by weight.

44. (withdrawn) The composition of claim 1, which is an aqueous composition with a content in hydrophobic silicon containing particles with an average primary particle size of less than 100nm of at least 15% by weight.

45. (withdrawn) The composition of claim 1, which further comprises an agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

46. (withdrawn) The composition of claim 45, in which the povidone derivative is selected from the group consisting of Polyvinylpyrrolidone, cross linked vinylpyrrolidone, alkylated vinylpyrrolidone copolymers, vinyl acetate/vinyl pyrrolidone copolymers, vinyl pyrrolidone/styrene block copolymers, vinyl ether/maleic anhydride copolymers, vinyl pyrrolidone/dimethylaminoethyl methacrylate copolymers, and mixtures thereof.

47. (withdrawn) The composition of claim 1, which further comprises one element selected from the group consisting of compounds suitable for attracting the insect or worm or acaride or molluscs or mites or ticks to be combated, compounds suitable for repelling the insect or worm or acaride or molluscs or mites or ticks or dirt or birds to be repelled, insecticide compounds, solvents, dispersant, tensioactive, surfactant, germicide, antibacterial agent, herbicides, growth regulators, chitin inhibitor, antifungal agents, disintegrant, antialgae, hormones, chelating agents,

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essential oils, plant extracts, water retention agent, food, anti mollusc compounds, biocides, rodenticides, acaricides, and mixtures thereof

48. (withdrawn) The composition of claim 1, which is in a form selected from the group consisting of a powder, a suspension, granules, pellets, food additives, aerated gel, non aerated gel, colloidal medium, cream and combinations thereof.

49. (withdrawn) The composition of claim 1, which comprises at least one compound selected from the group consisting of additives and fillers, the weight ratio hydrophobic silicon containing nanoparticles with an average primary particle size lower than 100nm/ compound selected from the group consisting of additive and filler being comprised between 0.001 and 1000.

50. (withdrawn) The composition of claim 1, which comprises at least one compound selected from the group consisting of additives and fillers, the weight ratio hydrophobic silicon containing nanoparticles with an average primary particle size lower than 100nm / compound selected from the group consisting of additive and filler being comprised between 0.01 and 100.

51. (withdrawn) The composition of claim 1, which comprises at least one compound selected from the group consisting of additives and fillers, the weight ratio hydrophobic silicon containing nanoparticles with an average primary particle size lower than 100nm / compound selected from the group consisting of additive and filler being comprised between 0.05 and 20.

52. (withdrawn) The composition of claim 1, in which the hydrophobic silicon containing particles are particles provided with an outer layer selected from the group consisting of water soluble layers, entero soluble layers and combinations thereof.

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53. (withdrawn) The composition of claim 1, in which the silicon containing particles are provided with at least a hydrophilic silicon containing coating and with at least a hydrophobic silicon containing coating.

54. (withdrawn) The composition of claim 1, in which the silicon containing particles are particles with a modified structure.

55. (cancelled) Composition for combating at least one living organism selected from the group consisting of insects, molluscs, acarides, mites, ticks and parasites or for repelling at least one element selected from the group consisting of insects, molluscs, acarides, mites, ticks, parasites, water, dirt and birds, said composition comprising at least as active agent hydrophobic particles, and at least two gums selected from the group consisting of guar gum, xanthan gum and scleroglucan.

56. (withdrawn) The composition of claim 55, which further comprises an agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

57. (cancelled) The composition of claim 55, which comprises as active agent hydrophobic silicon containing particles with an average primary particle size lower than 100nm.

58. (withdrawn) The composition of claim 54, which comprises an effective amount of hydrophobic silicon containing particles with an average primary particle size lower than 100nm.

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59. (withdrawn) Composition for combating at least one living organism selected from the group consisting of insects, molluscs, acarides, mites, ticks and parasites, or for repelling at least one element selected from the group consisting of insects, molluscs, acarides, mites, ticks, parasites, water, dirt and birds, said composition comprising at least as active agent hydrophobic particles with an average primary particle size of less than 100nm, and at least one agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

60. (withdrawn) The composition of claim 59, in which the povidone derivative is selected from the group consisting of Polyvinylpyrrolidone, cross linked vinylpyrrolidone, alkylated vinylpyrrolidone copolymers, vinyl acetate/vinyl pyrrolidone copolymers, vinyl pyrrolidone/styrene block copolymers, vinyl ether/maleic anhydride copolymers, vinyl pyrrolidone/dimethylaminoethyl methacrylate copolymers, and mixtures thereof.

61. (withdrawn) The composition of claim 59, which comprises an effective amount of hydrophobic silicon containing particles with an average primary particle size lower than 100nm.

62. (withdrawn) Composition for combating at least one living organism selected from the group consisting of insects, molluscs, acarides, mites, ticks and parasites, or for repelling at least one element selected from the group consisting of insects, molluscs, acarides, mites, ticks, parasites, water, dirt and birds, said composition comprising at least as active agent hydrophilic particles with a primary particle size of less than 100nm, and at least two gums selected from the group consisting of guar gum, xanthan gum and scleroglucan.

63. (withdrawn) The composition of claim 62, which further comprises an agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

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64. (withdrawn) The composition of claim 62, in which the povidone derivative is selected from the group consisting of Polyvinylpyrrolidone, cross linked vinylpyrrolidone, alkylated vinylpyrrolidone copolymers, vinyl acetate/vinyl pyrrolidone copolymers, vinyl pyrrolidone/styrene block copolymers, vinyl ether/maleic anhydride copolymers, vinyl pyrrolidone/dimethylaminoethyl methacrylate copolymers, and mixtures thereof.

65. (withdrawn) The composition of claim 62, which comprises an effective amount of hydrophobic silicon containing particles with an average primary particle size lower than 100nm.

66. (withdrawn) Composition for combating at least one living organism selected from the group consisting of insects, molluscs, acarides, mites, ticks and parasites, or for repelling at least one element selected from the group consisting of insects, molluscs, acarides, mites, ticks, parasites, water, dirt and birds, said composition comprising at least as active agent hydrophilic particles with an average primary particle size of less than 100nm, and at least one agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

67. (withdrawn) The composition of claim 66, in which the povidone derivative is selected from the group consisting of Polyvinylpyrrolidone, cross linked vinylpyrrolidone, alkylated vinylpyrrolidone copolymers, vinyl acetate/vinyl pyrrolidone copolymers, vinyl pyrrolidone/styrene block copolymers, vinyl ether/maleic anhydride copolymers, vinyl pyrrolidone/dimethylaminoethyl methacrylate copolymers, and mixtures thereof.

68. (withdrawn) The composition of claim 66, which comprises an effective amount of hydrophilic silicon containing particles with an average primary particle size lower than 100nm.

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69. (withdrawn) Composition for combating at least one living organism selected from the group consisting of insects, molluscs, acarides, mites, ticks and parasites, or for repelling at least one element selected from the group consisting of insects, molluscs, acarides, mites, ticks, parasites, water, dirt and birds, said composition comprising at least as active agent hydrophobic clay with a primary particle size lower than 100 μ m.

70. (withdrawn) The composition of claim 69, which further comprises at least one agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

71. (withdrawn) The composition of claim 69, in which the povidone derivative is selected from the group consisting of Polyvinylpyrrolidone, cross linked vinylpyrrolidone, alkylated vinylpyrrolidone copolymers, vinyl acetate/vinyl pyrrolidone copolymers, vinyl pyrrolidone/styrene block copolymers, vinyl ether/maleic anhydride copolymers, vinyl pyrrolidone/dimethylaminoethyl methacrylate copolymers, and mixtures thereof.

72. (withdrawn) The composition of claim 69, which comprises at least a gelling agent selected from the group consisting of water soluble gelling agent and water dispersible gelling agent.

73. (withdrawn) The composition of claim 69, which comprises from 0.01 to 10% by weight of gelling agent selected from the group consisting of water soluble gelling agent and water dispersible gelling agent.

74. (withdrawn) The composition of claim 69, which comprises from 0.01 to 5% by weight of gelling agent selected from the group consisting of water soluble gelling agent and water dispersible gelling agent.

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75. (withdrawn) The composition of claim 69, which comprises at least one gum selected from the group consisting of guar gum, xanthan gum, scleroglucan and mixtures thereof.

76. (withdrawn) The composition of claim 69, which comprises at least two gums selected from the group consisting of guar gum, xanthan gum and scleroglucan.

77. (withdrawn) The composition of claim 69, which comprises hydrophobic clay particles with a particle size greater than 10 μ m.

78. (withdrawn) The composition of claim 69, which comprises clay particles selected from the group consisting of bentonite, hectorite and mixtures thereof.

79. (withdrawn) The composition of claim 69, which comprises hydrophobic clay with a particle size comprised between 1 μ m and 100 μ m, and hydrophobic clay with a primary particle size comprised between 10nm and 100nm.

80. (withdrawn) Composition for combating at least one living organism selected from the group consisting of insects, molluscs, acarides, mites, ticks and parasites, or for repelling at least one element selected from the group consisting of insects, molluscs, acarides, mites, ticks, parasites, water, dirt and birds, said composition comprising at least as active agent coated silicon containing particles, said particles having an average primary particle size of less than 100 nm, whereby the coating is a hydrophilic silicon containing coating.

81. (withdrawn) The composition of claim 80, which comprises at least as active agent coated silicon containing particles, said particles having an average primary particle size of less than 50 nm, whereby the coating is a hydrophilic silicon containing coating.

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82. (withdrawn) The composition of claim 80, which comprises at least as active agent coated silicon containing particles, said particles having an average primary particle size comprised between 5 and 40 nm, whereby the coating is a hydrophilic silicon containing coating.

83. (withdrawn) The composition of claim 80, which comprises silicon containing particles coated with a hydrophilic silicon containing coating.

84. (withdrawn) The composition of claim 80, in which the hydrophilic coating is overcoated with an outer layer selected among the group consisting of water soluble layers, entero soluble layers and combinations thereof.

85. (withdrawn) The composition of claim 80, in which the silicon containing particles are provided with at least a hydrophilic silicon containing coating and with at least a hydrophobic silicon containing coating.

86. (withdrawn) The composition of claim 80, in which the coated silicon containing particles are coated particles with a modified structure.

87. (withdrawn) The composition of claim 80, which comprises at least 0.5% by weight hydrophilic silicon containing particles with an average primary particle size of less than 100nm.

88. (withdrawn) The composition of claim 80, which comprises at least 2% by weight hydrophilic silicon containing particles with an average primary particle size of less than 100nm.

89. (withdrawn) The composition of claim 80, which comprises at least 7% by weight hydrophilic silicon containing particles.

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90. (withdrawn) The composition of claim 80, which comprises at least 15% by weight hydrophilic silicon containing particles.
91. (withdrawn) The composition of claim 80, in which the hydrophilic silicon containing particles have a BET surface area of at least 125 m²/g.
92. (withdrawn) The composition of claim 80, which further comprises at least a gelling agent.
93. (withdrawn) The composition of claim 80, which comprises at least a gelling agent selected from the group consisting of water soluble gelling agent and water dispersible gelling agent.
94. (withdrawn) The composition of claim 80, which comprises from 0.01 to 10% by weight of gelling agent selected from the group consisting of water soluble gelling agent and water dispersible gelling agent.
95. (withdrawn) The composition of claim 80, which comprises at least one gum selected from the group consisting of guar gum, xanthan gum, scleroglucan and mixtures thereof.
96. (withdrawn) The composition of claim 80, which comprises at least two gums selected from the group consisting of guar gum, xanthan gum and scleroglucan.
97. (withdrawn) The composition of claim 80, which is an aqueous composition with a content in hydrophilic silica containing particles with an average primary particle size of less than 100nm comprised between 0.5 and 70% by weight.

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98. (withdrawn) The composition of claim 80, which further comprises an agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

99. (withdrawn) The composition of claim 98, in which the povidone derivative is selected from the group consisting of Polyvinylpyrrolidone, cross linked vinylpyrrolidone, alkylated vinylpyrrolidone copolymers, vinyl acetate/vinyl pyrrolidone copolymers, vinyl pyrrolidone/styrene block copolymers, vinyl ether/maleic anhydride copolymers, vinyl pyrrolidone/dimethylaminoethyl methacrylate copolymers, and mixtures thereof.

100. (withdrawn) The composition of claim 80, which further comprises from 0.1% to 10% by weight of an agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

101. (withdrawn) Composition for combating at least one living organism selected from the group consisting of insects, molluscs, acarides, mites, ticks and parasites, or for repelling at least one element selected from the group consisting of insects, molluscs, acarides, mites, ticks, parasites, water, dirt and birds, said composition comprising at least as active agent coated silicon containing particles, said particles having an average primary particle size of less than 100 nm, whereby the coating comprises a portion which is a hydrophilic silicon containing coating and another portion which is a hydrophobic silicon containing coating.

102. (withdrawn) The composition of claim 101, which comprises coated silicon containing particles, said particles having an average primary particle size of less than 100 nm and being provided with an outer coating comprising a portion which is a hydrophilic silicon containing coating and another portion which is a hydrophobic silicon containing coating.

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103. (withdrawn) The composition of claim 101, which comprises at least as active agent coated silicon containing particles, said particles having an average primary particle size of less than 50 nm, whereby the coating comprises a portion which is a hydrophilic silicon containing coating and another portion which is a hydrophobic silicon containing coating.

104. (withdrawn) The composition of claim 101, which comprises at least as active agent coated silicon containing particles, said particles having an average primary particle size comprised between 5 and 40 nm, whereby the coating comprises a portion which is a hydrophilic silicon containing coating and another portion which is a hydrophobic silicon containing coating.

105. (withdrawn) The composition of claim 101, in which the coating selected from the group consisting of hydrophobic coating and hydrophilic coating is overcoated with an outer layer selected from the group consisting of water soluble layers, enterosoluble layers and combinations thereof.

106. (withdrawn) The composition of claim 101, in which the coated silicon containing particles are coated particles with a modified structure.

107. (withdrawn) The composition of claim 106, in which the hydrophobic silicon containing particles have a BET surface area of at least 125 m²/g.

108. (withdrawn) The composition of claim 106, which further comprises at least a gelling agent.

109. (withdrawn) The composition of claim 106, which comprises at least a gelling agent selected from the group consisting of water soluble gelling agent and water dispersible gelling agent.

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110. (withdrawn) The composition of claim 106, which comprises from 0.01 to 10% by weight of gelling agent selected from the group consisting of water soluble gelling agent and water dispersible gelling agent.

111. (withdrawn) The composition of claim 106, which comprises at least one gum selected from the group consisting of guar gum, xanthan gum, scleroglucan and mixtures thereof.

112. (withdrawn) The composition of claim 106, which comprises at least two gums selected from the group consisting of guar gum, xanthan gum and scleroglucan.

113. (withdrawn) The composition of claim 106, which is an aqueous composition with a content in silica containing particles with a primary particle size of less than 100nm comprised between 0.5 and 70% by weight.

114. (withdrawn) The composition of claim 106, which further comprises an agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

115. (withdrawn) The composition of claim 114, in which the povidone derivative is selected from the group consisting of Polyvinylpyrrolidone, cross linked vinylpyrrolidone, alkylated vinylpyrrolidone copolymers, vinyl acetate/vinyl pyrrolidone copolymers, vinyl pyrrolidone/styrene block copolymers, vinyl ether/maleic anhydride copolymers, vinyl pyrrolidone/dimethylaminoethyl methacrylate copolymers, and mixtures thereof.

116. (withdrawn) The composition of claim 106, which further comprises from 0.1% to 10% by weight of an agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

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117. (withdrawn) The composition of claim 106, which comprises at least 1% by weight silicon containing particles.

118. (withdrawn) The composition of claim 106, which comprises at least 7% by weight silicon containing particles.

119. (withdrawn) The composition of claim 106, which comprises at least 15% by weight silicon containing particles.

120. (withdrawn) Composition for combating at least one living organism selected from the group consisting of insects, molluscs, acarides, mites, ticks and parasites, or for repelling at least one element selected from the group consisting of insects, molluscs, acarides, mites, ticks, parasites, water, dirt and birds, said composition comprising at least as active agent :

- hydrophilic silicon containing particles, said particles having an average primary particle size of less than 100 nm, and
- hydrophobic silicon containing particles, said particles having an average primary particle size of less than 100 nm,

the weight ratio active hydrophilic silicon containing particles /active hydrophobic silicon containing particles being comprised between 1/100 and 100/1.

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121. (withdrawn) Composition for combating at least one living organism selected from the group consisting of insects, molluscs, acarides, mites, ticks and parasites, or for repelling at least one element selected from the group consisting of insects, molluscs, acarides, mites, ticks, parasites, water, dirt and birds, said composition comprising at least as active agent :

- hydrophilic silicon containing particles, said particles having an average primary particle size of less than 50 nm, and
- hydrophobic silicon containing particles, said particles having an average primary particle size of less than 50 nm,

the weight ratio active hydrophilic silicon containing particles /active hydrophobic silicon containing particles being comprised between 1/50 and 2/1.

122. (withdrawn) The composition of claim 120, which comprises at least as active agent :

- coated silicon containing particles, said particles having an average primary particle size of less than 100 nm, whereby the outer coating is a hydrophilic silicon containing coating, and
- coated silicon containing particles, said particles having an average primary particle size of less than 100 nm, whereby the outer coating is a hydrophobic silicon containing coating,

the weight ratio active silicon containing particles with a outer hydrophilic silicon containing coating/active coated silicon containing particles with an outer hydrophobic silicon containing coating being comprised between 1/100 and 100/1.

123. (withdrawn) The composition of claim 120, which further comprises at least a gelling agent.

124. (withdrawn) The composition of claim 120, which comprises at least a gelling agent selected from the group consisting of water soluble gelling agent and water dispersible gelling agent.

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125. (withdrawn) The composition of claim 120, which comprises from 0.01 to 10% by weight of gelling agent selected from the group consisting of water soluble gelling agent and water dispersible gelling agent.

126. (withdrawn) The composition of claim 120, which comprises at least one gum selected from the group consisting of guar gum, xanthan gum, scleroglucan and mixtures thereof.

127. (withdrawn) The composition of claim 120, which comprises at least two gums selected from the group consisting of guar gum, xanthan gum and scleroglucan.

128. (withdrawn) The composition of claim 120, which is an aqueous composition with a content in silica containing particles with an average primary particle size of less than 100nm comprised between 0.5 and 70% by weight.

129. (withdrawn) The composition of claim 120, which further comprises an agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

130. (withdrawn) The composition of claim 129, in which the povidone derivative is selected from the group consisting of Polyvinylpyrrolidone, cross linked vinylpyrrolidone, alkylated vinylpyrrolidone copolymers, vinyl acetate/vinyl pyrrolidone copolymers, vinyl pyrrolidone/styrene block copolymers, vinyl ether/maleic anhydride copolymers, vinyl pyrrolidone/dimethylaminoethyl methacrylate copolymers, and mixtures thereof.

131. (withdrawn) The composition of claim 120, which further comprises from 0.1% to 10% by weight of an agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

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132. (withdrawn) The composition of claim 120, which comprises at least 1% by weight silicon containing particles.

133. (withdrawn) The composition of claim 120, which comprises at least 7% by weight hydrophobic silicon containing particles.

134. (withdrawn) The composition of claim 120, which comprises at least 15% by weight hydrophobic silicon containing particles.

135. (withdrawn) A support provided with at least one composition comprising at least as active agent for combating or repelling insects, molluscs, acarides, mites, ticks, dirt and parasites, said active agent being selected from the group consisting of hydrophobic silicon containing particles with a primary particle size of less than 100nm, hydrophobic clay, guar gum, scleroglucan, xanthan gum, povidone, povidone derivatives, and mixtures thereof..

136. (withdrawn) The support of claim 135, which is selected from the group consisting of animals or portions thereof, humans and portion thereof, plants and portions thereof, buildings and portions thereof, grounds, soils, plastic, carpets, furniture, springs, mattress and portion thereof, tissues, fabrics, cushions, garments, clothes, metals, recipients, closing means, filter, bands, feather, leather, hair, and combinations thereof.

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137. (withdrawn) Process for combating at least one living organism selected from the group consisting of insects, molluscs, acarides, mites, ticks and parasites, or for repelling at least one element selected from the group consisting of insects, molluscs, acarides, mites, ticks, parasites, water, dirt and birds, in which at least one living organism selected from the group consisting of insects to be combated or repelled, mites to be combated or repelled, ticks to be combated or repelled, parasites to be combated or repelled, molluscs to be combated or repelled, acarides to be combated or repelled, birds to be repelled, eggs thereof, larvae thereof, pupae thereof and combinations thereof contact at least one composition for combating or repelling said living organism, said composition being a composition comprising at least hydrophobic silicon containing particles with a primary average particle size of less than 100nm4.

138. (withdrawn) The process of claim 137 for combating or repelling living organisms present on a living body selected from the group consisting of living body with hair, living body with feather.

139. (withdrawn) The process of claim 137 for combating blood sucking living organisms.

140. (withdrawn) The process of claim 137 for combating blood sucking living organisms present on chicken.

141. (withdrawn) The process of claim 137 for combating living organisms causing health problems for plant.

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142. (withdrawn) Process for preventing troubles to living body selected from the group consisting of humans, animals and plants due to insects, molluscs, acarides, mites, ticks and parasites, in which at least a portion of the living body is contacted with a composition for combating or repelling said living organism, said living organism being selected from the group consisting of insects to be combated or repelled, mites to be combated or repelled, molluscs to be combated or repelled, acarides to be combated or repelled, ticks to be combated or repelled, parasites to be combated or repelled, birds to be repelled, eggs thereof, larvae thereof, pupae thereof, dirt and combinations thereof, said composition being a composition comprising as active agent at least hydrophobic silicon containing particles with a primary particle size of less than 100nm.

143. (withdrawn) Process for combating blood sucking living organisms living on chicken, in which the chicken contacts a composition comprising at least as active agent coated silicon containing particles, said particles having an average primary particle size comprised between 5 and 40nm and being provided with a coating at least different from a silanol coating.

144. (withdrawn) Process for combating blood sucking living organisms living on chicken, in which the chicken contacts a composition comprising at least as active agent hydrophobic silicon containing particles, said particles having an average primary particle size comprised between 5 and 40nm, and at least two gums selected from the group consisting of guar gum, xanthan gum and scleroglucan

145. (withdrawn) Process for combating blood sucking living organisms living on chicken, in which the chicken contacts a composition comprising at least as active agent silicon containing particles provided with a hydrophobic coating, said particles having an average primary particle size comprised between 5 and 40nm, and at least two gums selected from the group consisting of guar gum, xanthan gum and scleroglucan.

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146. (withdrawn) Process for combating blood sucking living organisms living on chicken, in which the chicken contacts a composition comprising at least as active agent hydrophobic silicon containing particles, said particles having an average primary particle size comprised between 5 and 40nm, and at least one clay selected among the group consisting of bentonite, hectorite and mixtures thereof.

147. (withdrawn) Process for combating blood sucking living organisms living on chicken, in which the chicken contacts a composition comprising at least as active agent hydrophobic silicon containing particles, said particles having an average primary particle size comprised between 5 and 40nm, and at least an agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

148. (withdrawn) Process for combating blood sucking living organisms living on chicken, in which the chicken contacts a composition comprising :

- at least as active agent hydrophobic silicon containing particles, said particles having an average primary particle size comprised between 5 and 40nm,
- at least two gums selected from the group consisting of guar gum, xanthan gum and scleroglucan,
- at least a clay selected from the group consisting of bentonite, hectorite and mixtures thereof, and
- at least an agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

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149. (previously presented) The composition of claim 38, which comprises from 0.1% to 10% by weight of gums selected from the group consisting of guar gum, xanthan gum and scleroglucan.

150. (previously presented) The composition of claim 38, which comprises from 0.2% to 5% by weight of gums selected from the group consisting of guar gum, xanthan gum and scleroglucan.

151. (previously presented) The composition of claim 38, which is an aqueous dispersion.

[[151]] (currently amended) 164. The composition of claim 38, which is a water dispersible powder.

152. (currently amended) The composition of claim 38, in which hydrophobic coated silicon (Si) containing particles comprises also some aluminum.

153. (currently amended) The composition of claim 38, which comprises at least 15% by weight [[.]] hydrophobic silicon (Si) containing particles with an average primary particle size comprised between 5 and 40nm and with a BET surface area of at least 125m²/g.

154. (currently amended) The composition of claim 38, which comprises at least 20% by weight [[.]] hydrophobic silicon (Si) containing particles with an average primary particle size comprised between 5 and 40nm and with a BET surface area of at least 125m²/g.

155. (currently amended) The composition of claim 38, which comprises at least 20% to 75% by weight [[.]] hydrophobic silicon (Si) containing particles with an average primary particle size comprised between 5 and 40nm and with a BET surface area of at least 125m²/g.

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156. (cancelled) The composition of claim 38, in which the active hydrophobic silicon containing particles are selected from the group consisting of kaolinite, montmorillonite, attapulgite, hectorite, smectite, illite, bentonite, halloysite, vermiculite, sepiolite, beidellite, palygorskite, talc, SiO₂, and mixtures thereof, said particles being provided with a hydrophobic coating.

157. (currently amended) The composition of [[the]] claim [[153]] 38, in which the hydrophobic coating is made of a silicon containing product selected from the group consisting of chlorosilane, disilazane, fluorosilazane, polysiloxane, cyclotetrasiloxane, methacrylic silane, silicon oil, modified silicon oil, and [[derivatives]] mixtures thereof.

158. (currently amended) the composition of claim 38, in which the hydrophobic coating silicon (Si) containing particles are particles provided with is made of a [[hydrophobic]] silicon containing [[coating which]] product comprising [[comprises]] at least one element selected from the group consisting of functionalized silanes, siloxane, silicon oil, modified silicon oil and mixtures thereof.

159. (currently amended) The composition of claim 38, which comprises at least hydrophobic silicon (Si) containing particles selected from the group consisting of hydrophobic bentonite particles comprising a hydrophobic coating, hydrophobic hectorite particles comprising a hydrophobic coating, SiO₂ particles comprising a hydrophobic coating, and mixtures thereof.

160. (previously presented) The composition of claim 38, which further comprises an agent selected from the group consisting of povidone, povidone derivatives, and mixtures thereof.

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161. (previously presented) The composition of claim 160, in which the povidone derivative is selected from the group consisting of Polyvinylpyrrolidone, cross linked vinylpyrrolidone, alkylated vinylpyrrolidone copolymers, vinyl acetate/vinyl pyrrolidone copolymers, vinyl pyrrolidone/styrene block copolymers, vinyl ether/maleic anhydride copolymers, vinyl pyrrolidone/dimethylaminoethyl methacrylate copolymers, and mixtures thereof.

162. (currently amended) The composition of claim 38, which further comprises one element selected from the group consisting of compounds suitable for attracting the insect or worm or acaride or molluscs or mites or ticks to be combated, compounds suitable for repelling the insect or worm or acaride or molluscs or mites or ticks or dirt [[or birds]] to be repelled, insecticide compounds, solvents, dispersant, tensioactive, surfactant, germicide, antibacterial agent, herbicides, growth regulators, chitin inhibitor, antifungal agents, disintegrant, antialgae, hormones, chelating agents, essential oils, plant extracts, water retention agent, food, anti mollusc compounds, biocides, rodenticides, acaricides, and mixtures thereof.

163. (currently amended) The composition of claim 38, in which the hydrophobic silicon (Si) containing particles are particles with a modified structure achieved by breaking agglomerated nanoparticles.